

**RELIEF WELL REPAIR
CHENA LAKES RIVER PROJECT,
FAIRBANKS, ALASKA**

PERFORMANCE-BASED SERVICE CONTRACTING (PBSC)

WORK STATEMENT

SECTION A

A.1. GENERAL

A.1.1 Scope of Work: The work to be performed under this contract consists of furnishing all labor, supervision, transportation, materials, supplies, tools, equipment, unless specified as Government furnished, to perform all work in connection with the repair of nine (9) relief wells and the option to repair eight (8) additional relief wells at the Chena Lakes River Project, near Fairbanks, Alaska.

A.1.2 Background and Existing Information: The relief wells relieve excess pore water pressure in the foundation soils of the earth-filled dam structure during a flood or high water event. The wells are located on the downstream side of the dam and extend to depths of about one-hundred two (102) to one-hundred twenty two (122) feet below ground surface (bgs). The screened and riser sections of the wells are composed of stainless steel and steel respectively. Both are twelve (12) inches in inside diameter (ID). The riser section of the wells extends to a depth ranging between ten (10) and fifteen (15) feet bgs. The relief wells that need repair have "frost-jacked" and consequently separated at the screen/casing joint section of the well. Various degrees of vertical and horizontal displacement have occurred at this location allowing fine and coarse-grained soils to infill the well. These wells need to be repaired to function properly during a flood or high water event.

A.1.3 Contractor Plan: The Contractor shall furnish to the Government an innovative, economical, and practical plan to repair the relief wells within seven (7) workdays of the receipt of the contract work statement. The Government considers the repair of the separated casing/screen portion of the well to be the critical part of this contract. Therefore, the Contractor's plan shall place particular emphasis on this concern. The Contractor's plan shall be clear and concise and include a complete and detailed cost breakdown to complete all repairs.

A.1.3.1 Contractor Plan Approval: The Government will review the Contractor's plan and provide comments as appropriate. The Contractor must furnish a satisfactory plan prior to contract award.

A.1.4 Time Schedule: All work shall begin no later than July 15, 1999 and all work shall be completed by September 15, 1999.

A.1.5 Personnel

A.1.5.1 Project Manager: The Contractor shall provide an onsite Project Manager or a designated representative to be physically present during work hours of operation to act with full authority for the Contractor. This individual shall be responsible for the supervision, overall administration, and coordination of the required services. The Project Manager shall be the point of contact with the Government and have the authority to act or make decisions for the Contractor. The Contractor shall provide names and telephone/beeper numbers to the Contracting Officer within ten (10) calendar days after the award of the contract. The Contractor shall provide notice, in writing, to the Contracting Officer of any change of Project Manager or alternate.

A.1.5.2 Other Personnel: The Contractor shall provide personnel who are legally entitled to work in the United States to accomplish all work and service specified herein.

A.1.5.3 Conflict of Interest: The Contractor shall not employ any person whose employment will violate the requirements of DOD 5500-7R.

A.1.5.4 Conduct of Personnel: The Contractor shall not employ any person whose employment will violate the requirements Conduct of Personnel. The Contractor is fully responsible for the performance and conduct of his employees at all times while performing under this contract. The Contractor shall not allow any employee to perform work under this contract while under the influence of alcohol, drugs or any other incapacitating agent.

A.1.6 Quality Control Program

A.1.6.1 Quality Control Responsibility: Quality control is the responsibility of the Contractor. The Contractor shall establish and maintain an inspection program covering all the services stated in the Performance Work Statement. The program shall specify areas to be inspected on either a scheduled or unscheduled basis and the name and job title of the individual who shall do the inspection.

A.1.6.2 Inspection Program: The inspection program shall include a method for identifying deficiencies in the quality of repairs performed before the level of performance becomes unacceptable.

A.1.6.2.1 Downhole camera/video: The inspection program shall include a downhole camera/video method for identifying any deficiencies in the well screen/casing joint section of the well annulus. The Contractor shall have qualified personnel and the proper equipment to accurately implement this method.

A.1.6.3 The Contractor shall maintain a file of all inspections conducted and the corrective action taken for all repaired wells.

A.1.6.4 Quality Control Plan: A Quality Control Plan shall be submitted to the Contracting Officer within ten (10) calendar days after date of award. It shall describe the Contractor's quality control program, the methods used to monitor quality control and contain samples of the documents to be used in the quality control program.

A.1.7 Security: The Contractor shall be responsible for the security of his supplies, equipment, and vehicles.

A.1.8 Performance Evaluation Meeting: The Project Manager shall meet with the Quality Assurance Evaluator (QAE) and Contracting Officer as often as necessary as determined by the Contracting Officer. A meeting shall be held each time a contract discrepancy report is issued. A mutual effort shall be made by the Contractor and Contracting Officer to resolve all problems identified.

A.1.9 Safety: The Contractor shall execute constant supervision to ensure immediate compliance with the US Army Corps of Engineers – Safety and Health Requirements Manual (EM-385-1-1) during the course of performance of the work under this contract. The Contracting Officer shall notify the Contractor of any noncompliance with the safety requirement and action to be taken.

SECTION A.2

A.2 Definitions

A.2.1 Contractor: The individual or company responsible for performing the duties and responsibilities covered in the contract.

A.2.2 Contract Discrepancy Report (CDR): A formal, written documentation of Contractor nonconformance or lack of performance of contracted work.

A.2.3 Quality Assurance Evaluator (QAE): A representative of the Contracting Officer who performs quality surveillance and inspection of the Contractor's performance, and advised the Contractor of rework requirements.

A.2.4 Quality Assurance Surveillance Plan: A written plan that details what is to be evaluated, how evaluations are to be accomplished, frequency of evaluations, evaluation parameters, inspection checklists, and other information that the QAE should have in order to provide effective Quality Assurance.

A.2.5 Quality Control Program: This term shall mean all necessary measures taken by

the Contract to assure that the quality of an end product or repairs shall meet the contract requirements regarding timeliness, accuracy, appearance, completeness, consistency, and conformity to standards and/or specifications.

A.2.6 Rework: Any work the Contractor is required to accomplish due to unsatisfactory performance or nonperformance in accordance with the stated quality and level of effort specified in the contract. Rework is performed at no additional cost to the Government.

SECTION A.3

A.3 GOVERNMENT FURNISHED ITEMS

A.3.1 GOVERNMENT FURNISHED FACILITIES, MATERIALS, AND SERVICES: The Government will provide to the Contractor all available information related to this contract. No material, equipment, storage, or administrative space shall be furnished by the Government for the performance of work specified.

SECTION A.4

A.4 CONTRACTOR FURNISHED ITEMS

A.4.1 The Contractor shall furnish all personnel, plant, equipment, transportation, and materials to the standards herein. Inoperable equipment shall not be cause of non-performance of this contract requirement.

A.4.2 Communications: The Contractor shall provide a telephone number where he or his representative may be reached during work hours.

A.4.3 The Contractor shall provide to the Contracting Officer for approval a written schedule for relief well repair no later than seven (7) working days prior to the work start date.

A.4.4 If delay in Government approved schedule is anticipated, the Contractor shall notify in writing the Contracting Officer or designated representative not later than three (3) days prior to scheduled work start date.

A.4.5 The Contractor shall honor the manufacturer's warranty on any parts used to repair the relief wells and shall provide the Government with one (1) year defect-free installation warranty.

SECTION A.5

A.5 DESCRIPTION OF WORK

A.5.1 The Contractor shall furnish all labor, supervision, transportation, materials, supplies, tools, and equipment, except as specified as Government furnished, to accomplish all required work.

A.5.2 Management:

A.5.2.1 Rework: The Contractor shall be required to re-perform all work that does not meet the requirements of this specification. The Contractor shall have twenty-four (24) working hours from the time of notification of deficiency to perform rework at no additional cost to the Government.

A.5.2.2 Contractor Availability: The Contractor or designated Project Manager shall be available during working hours at a local telephone or beeper. The Contractor shall provide the telephone or beeper number(s) to the Contracting Officer ten (10) days after date of award. The Contractor shall return calls within one (1) hour during working hours or no later than 9:00 AM the following day.

A.5.3 Repair Work Requirements:

A.5.3.1 A listing of the relief wells that need repairs are shown in Table 1.

A.5.3.2 Repairs: The work requirements for the relief wells are as follows:

- a) The Contractor shall remove and dispose of all existing concrete around the well casing and well head.
- b) The Contractor shall place new concrete around the well head. Concrete shall also be placed around the well casing extending from the well head to the top of the new insulation foam board.
- c) The Contractor shall remove and dispose of all frost susceptible materials within a eight foot square footprint centrally located around the relief well to a depth of three (3) feet bgs.
- d) The Contractor shall install a six (6) inch layer of insulation to a depth of three (3) feet bgs. The insulation shall be composed of a polystyrene insulated foam board designed for underground use and shall have a minimum Resistance Value or R-Value ($\text{hr} \cdot \text{ft}^2 \cdot \text{F}^\circ / \text{BTU}$) of 4.30 per inch of insulation thickness. The insulation shall be centrally placed around the well casing covering a minimum eight (8) foot by eight (8) foot square area.
- e) The insulation shall be covered with a minimum two and one-half (2.5) feet of moderately compacted non-frost susceptible soil.
- f) The Contractor shall remove and dispose of all infilled material in the well.

- g) The Contractor shall develop the well.
- h) The Contractor shall leave in place the existing well screen and attach existing twelve (12) inch ID casing or a new casing equal to or better in composition, no smaller than ten(10) inches in ID to the existing screen.
- i) The Contractor shall properly seal screen / casing connection to prevent any material from getting through annulus into well.
- j) The Contractor shall re-use the existing well head and properly secure it to the casing.
- k) After completion of work the Contractor shall remove all materials, equipment, and debris incidental to the work. All excavations and vehicular ruts shall be backfilled and dressed to conform to the existing landscape.

Table 1: Relief Well Repair List

No.	Station	Date Constructed	As built Depth ft. bgs.	Total Well depth (ft.) as of Oct 98	Notes
1	277+29	1982	122	14.5	8" casing previously inserted for repair
2	277+78	1982	122	13	8" casing previously inserted for repair
3	356+03	1994	102	61.5	casing and screen separated and offset at bottom of first weld ring
4	356+42	1994	102	14.5	casing and screen separated and offset at bottom of first weld ring
5*	356+81	1994	102	13.5	
6*	357+20	1994	102	12.5	
7*	357+60	1982	122	15.5	casing and screen separated and offset at bottom of first weld ring
8*	358+44	1994	102	17	casing and screen separated and offset at bottom of first weld ring
9*	358+85	1982	122	15	
10*	359+27	1995	102	12	
11*	359+69	1994	102	13.5	
12*	360+52	1994	102	12	
13*	375+00	1997	122	12.5	casing and screen separated and offset at bottom of first weld ring
14	441+27	1994	102	34.5	
15	441+50	1994	102	28	
16	441+75	1994	102	71	
17	441+97	1994	102	36	

Note:

- 1) Stationing refers to dam center-line.
- 2) The Contractor shall take necessary precautions to protect existing relief wells and piezometers during work. The Contractor at no additional cost shall repair any damages caused by Contractor under this contract to the Government.
- 3) Upon Government approval, the Contractor may use a portion of the project office area at the project site as a staging/storage area.
- 4) Two different relief well heads are present at the site; designated as old and new. The old well heads are present in wells constructed prior to 1994. The new well heads are present in wells constructed after 1994.
- 5) All Relief Wells are located in the downstream toe of the stability berm.
- 6) "*" Denotes relief wells that are not optional
- 7) **Script** denotes relief wells that are optional.

SECTION A.6**A.6 PERFORMANCE STANDARDS****A.6.1 Repairs:**

Required Service (Performance Requirements)	Standard (Performance Standards)	Maximum Allowable Degree of Deviation Requirement (AQL)	Method of Surveillance (Quality Assurance)	Maximum Payment Percentage for Meeting the AQL (Incentives)
A.5.3.2	Completeness Accuracy Timeliness	0%	100% Inspection	100%
Notes:				

SECTION A.7**A.7 SUBMITTALS**

A.7.1 The Contractor shall submit for approval all materials, equipment, and supplies to be used in this project prior to commencement of work.